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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,514	09/25/2001	Aaron R. Kunze	10559-526001	3324
20985 7590 09/12/2007 FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER HYUN, SOON D	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 09/12/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/965,514	Applicant(s) KUNZE ET AL.	
	Examiner Soon D. Hyun	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1, 2, and 4-29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 5, 6, 8, 9, 11, 13-15, 23, and 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Bachmutsky et al (U.S. Patent No. 6,633,538).

Regarding claims 1, 8, 13, 14, and 23, Bachmutsky et al (Bachmutsky) discloses a method, apparatus a computer readable medium for routing (a router having a look up table in FIG. 3, col. 1, lines 22-26) comprising:

a network interface (FIG. 3) to receive data packets;
a processor (it is inherently required for the router of Bachmutsky et al, (see claim 10) coupled with the network interface;

a memory coupled with the processor (it is inherently required for the router of Bachmutsky, see claim 10) to instruct the processor to load a routing data structure (FIG.4) to store information indicating that the received data packet is to be dropped if the received data packet includes a predetermined non-forwarding destination address comprising a destination address that is invalid for packets traveling between networks (col. 4, lines 57-59).

Regarding claims 2 and 9, Bachmutsky et al further discloses that the routing data structure (FIG.4) comprises routing tables.

Regarding claim 5, 6, 11, 15, and 25-27, Bachmutsky et al further discloses that the stored information comprises a portion of address field (FIG. 4) and a format for the destination address is defined by Internet Protocol version four (col. 1, lines 21-30). Therefore, it is inherent that the address portion based on Internet protocol comprises a network identifier and the network is a subnet of the Internet.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 4, 10 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmutsky et al (U.S. Patent No. 6,633,538) in view of Sawada et al (US 2002/0016858).

Regarding claims 4 and 10, refer to the discussion for claims 1 and 8.

However, Bachmutsky et al does not explicitly teach whether the routing table (FIG. 4) has a one bit of discard flag for a packet having the invalid destination address.

Sawada et al teaches a routing table having a discard flag and an associated flag (pointer) for a packet with a destination address to be dropped. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate a one-bit discard flag into the routing table of Bachmutsky et al to drop the packets.

Bachmutsky et al and Sawada et al still does not teach a pointer to the flag.

It would have been obvious to one having ordinary skill in the art to incorporate a pointer for the table entry to speed a searching procedure associated with entries in the table.

Regarding claim 24, refer to the discussion for claims 10 and 23. Bachmutsky et al further discloses that the information a pointer (a link list) to a route entry to indicate a next-hop address (col. 4, lines 53).

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6. Claims 7, 12, 16-22, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmutsky et al (U.S. Patent No. 6,633,538)

Regarding claims 7, 12, and 16, Bachmutsky et al does not explicitly teach that the routing table (FIG. 4) comprises a deprecated directed broadcast address. It would have been obvious to one having ordinary skill in the art to enter any kind of address into the routing table for the processor to implement for filtering destination addresses matching entries in the table.

Regarding claim 17, Bachmutsky et al does not teach that dropped packets are counted and storing a source address and the destination address for the dropped packet.

It is well known in the art to count dropped packets for monitoring a status of a packet network. It would have been obvious to count a number of dropped packets and to store a source address and a destination address for a dropped packet to collect statistics for evaluating the status of the network.

Regarding claim 18, refer to the discussion for claim 1. However, Bachmutsky et al does not explicitly teach that the routing table comprises all information for any destination address. It would have been obvious to one having ordinary skill in the art to incorporate all information into entries of the table to find a route for any packet (col. 4, line 35-col. 5, line 51). Therefore, if the table comprises the routing table comprises all information for any destination address. it is inherent that any packet having valid destination address is transmitted to a second network and the valid destination

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address does not resolve (match) to the entry of entry 435 (an entry for invalid destination address) in the table.

Regarding claim 19, refer to the discussion for claims 2 and 18.

Regarding claim 20, Bachmutsky et al does not explicitly teach that the processor checks the destination address four bit at a time.

It would have been obvious to one having ordinary skill in the art to check the destination address four bits at a time if no unexpected results can be seen from the use of four bits at a time.

Regarding claim 21, refer to the discussion for claims 11 and 20.

Regarding claim 22, refer to the discussion for claims 7 and 21.

Regarding claim 28, refer to the discussion for claims 7 and 27.

Regarding claim 29, refer to the discussion for claims 26 and 28.


Conclusion


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon D. Hyun whose telephone number is 571-272-3121. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


S. Hyun
8/31/2007


CHI PHAM
SUPERVISORY PATENT EXAMINER

9/4/07